Workforce Development Strategies:
Cluster Report Executive Summary

USAID / Egypt

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EXECUTIVE SUMMARY

At the highest levels, Egypt recognizes the need for human capital development in order to increase its competitiveness in the global economy. In a July 1999 meeting with Vice President Gore, President Mubarak asked for U.S. assistance in three areas, one of which was human resource development. As a result of this conversation, and analysis already conducted, USAID/Egypt has included in its strategy a workforce development strategic objective that strives to obtain concrete results in this area. In response to the Mission's new strategic objective, a team from PricewaterhouseCoopers, SRI International, and J.E. Austin Associates (hereafter referred to as the Workforce Development Strategies (WDS) Team) was selected to help operationalize parts of this Mission strategy and conduct the Workforce Development Strategic Planning Process.

In August 1999, USAID/ Egypt agreed to undertake this process in the following three clusters: 1) tourism; 2) agribusiness; and 3) information technology. The Mission identified these clusters as potential growth industries where human resource and skills development issues are critical constraints to their growth and development. The Workforce Development Strategic Planning Process is designed to help policy-makers, educators, and industry stakeholders understand how competitiveness and workforce development are linked in a sector. It is a tool to generate productive dialogue among the stakeholders, leading to actions and commitments that strengthen the linkages between the needs of industry and workforce development policies, to the benefit of both. The set of interventions designed from this dialogue leverage private sector resources to promote and sustain industry competitiveness.

During this project, the WDS Team conducted two mission trips to Egypt. The first trip in September 1999 had three purposes: 1) to collect research on each cluster through stakeholder interviews, focus groups, and desk-top research; 2) to develop stakeholder relationships in order to discuss pressing workforce development issues; and 3) to make determinations of how to demarcate each cluster.
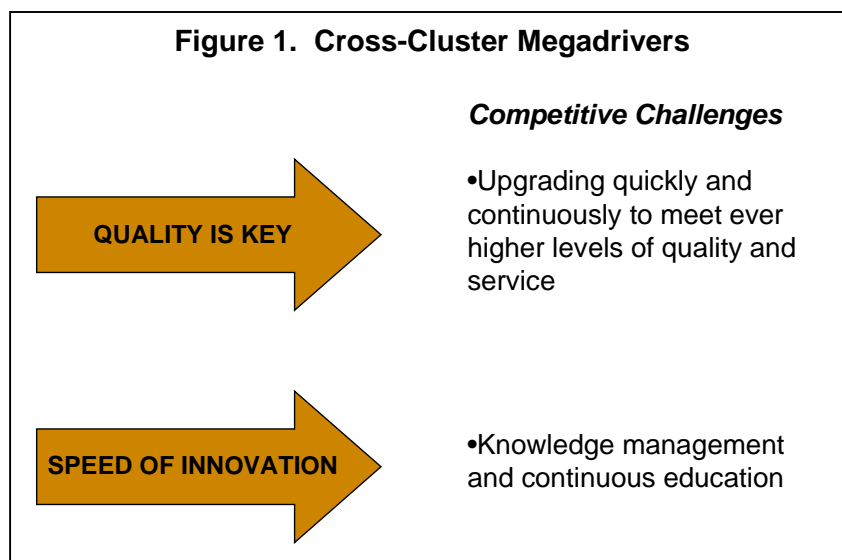
During the second mission trip, from October 31, 1999 through December 10, 1999, the WDS team continued to work with cluster stakeholders, held student focus groups, and conducted strategic planning workshops in each of the three clusters. The purpose of the strategic workshops was to go beyond identifying workforce development challenges, and to work with the Egyptian cluster stakeholders to design actionable and realistic initiatives that could begin to address some of the stated issues.

The Cluster Story

At each of the three cluster strategic planning workshops, the WDS Team attempted to present a compelling story of "why" workforce development stakeholder action is necessary to make the cluster more competitive. The three cluster reports tell this same story, written with the cluster stakeholders as the audience. It is the WDS Team's recommendation that USAID share each of the reports with the appropriate cluster

stakeholders. The document will help remind stakeholders of the workforce development initiatives they committed to undertake.

Like the workshop presentations, each of the three cluster reports tell this "compelling story" in the following sections:

Figure 1. Cross-Cluster Megadrivers

Competitive Challenges

QUALITY IS KEY → •Upgrading quickly and continuously to meet ever higher levels of quality and service

SPEED OF INNOVATION → •Knowledge management and continuous education

Global Trends: In each cluster report, this section highlights the major worldwide cluster trends that affect the growth prospects of the Egyptian industry cluster. The trends outlined are by no means the only global trends affecting the cluster. Rather, they represent the "megadrivers" that could have the biggest impact on the Egyptian industry's growth potential.

Although the megadrivers differ for each cluster, two trends cut across all three clusters. First, customers are demanding <u>consistent</u> high quality; they are picking what products and services to use based on the provider's reputation for quality. The second trend is the extraordinarily fast speed in which new products and services are introduced into the market.

What do these global trends imply for Egyptian clusters? In order to compete, Egyptian clusters will constantly need to upgrade and maintain the quality of their products and services, while also expanding their offerings through research and development, knowledge management, and continuous education. *(See Figure 1.)*

Egyptian Cluster: Each report also provides a high-level description of the Egyptian cluster, and specifically segments relevant to workforce development and competitiveness. This analysis is not an exhaustive cluster competitive analysis. Instead it focuses on information that is relevant for understanding the workforce development challenges in the cluster.
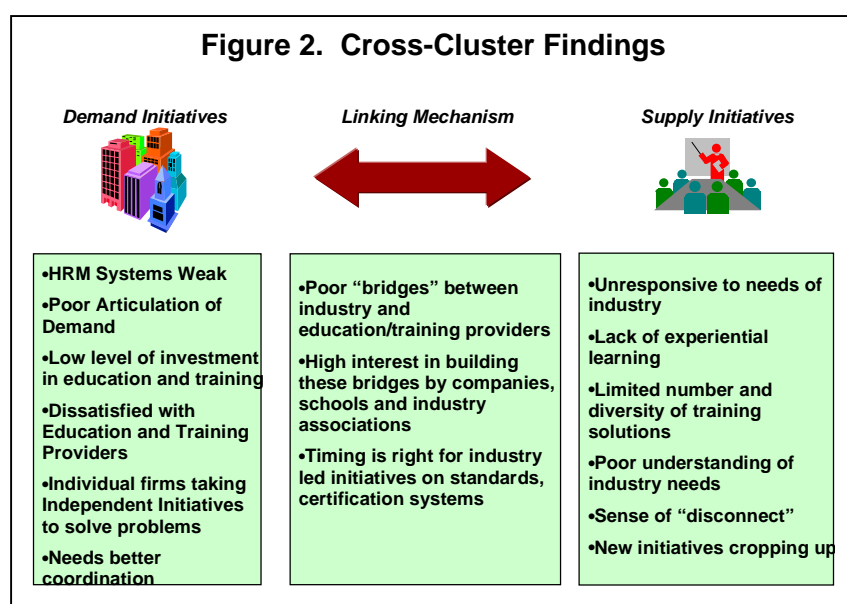
Workforce Implications: In light of the global trends and the WDS Team's analysis of the current challenges facing the Egyptian clusters, this section identifies many of the key skills gaps and other workforce development issues that must be addressed if the cluster is to be competitive. In this section the WDS Team also reviews the supply-side of the workforce equation, looking specifically at how well educators and training providers meet industry's skill needs.

Stakeholder Initiatives: The final section of each cluster report is a summary of the cluster strategic planning workshop. This section does not represent the WDS Team's recommendations to USAID on what initiatives the donor should support. Instead it serves to document the stakeholders' priorities and areas where this process began to generate stakeholder momentum for workforce development. The initiatives highlighted in this section represent actions that the stakeholders designed and, to varying degrees, committed to implement.

Also intertwined in the cluster reports are references to gender specific issues.[1] The purpose of including a gender component in this workforce development cluster strategic planning process is to increase private sector awareness of equity issues while pointing out ways for industries to improve their competitiveness by using all workforce participants as effectively as possible.

Cross-Cluster Initiatives

Throughout this project, and specifically in the strategic workshops, cluster stakeholders identified and prioritized numerous initiatives for workforce development improvements. Many initiatives were specific to an industry's internal human resource management, and some centered around increasing the relevance of training providers and educators' curriculum and teaching methods. A third set of initiatives focused on improving the linkages between demand (industry) and supply (educators / training providers). (*See Figure 2.*) There were also similarities between the types of initiatives cluster stakeholders would undertake to rectify these issues. Under each cluster, the initiatives fall into one of three broad categories:

Figure 2. Cross-Cluster Findings

Demand Initiatives

•HRM Systems Weak

•Poor Articulation of Demand

•Low level of investment in education and training

•Dissatisfied with Education and Training Providers

•Individual firms taking Independent Initiatives to solve problems

•Needs better coordination

Linking Mechanism

•Poor "bridges" between industry and education/training providers

•High interest in building these bridges by companies, schools and industry associations

•Timing is right for industry led initiatives on standards, certification systems

Supply Initiatives

•Unresponsive to needs of industry

•Lack of experiential learning

•Limited number and diversity of training solutions

•Poor understanding of industry needs

•Sense of "disconnect"

•New initiatives cropping up

- *Cluster-wide forums to facilitate dialogue on responses to workforce development problems.* The workshops served to highlight that the competitiveness of each firm depends on how well the cluster can address common workforce development priorities and challenges. The cluster stakeholder dialogue sessions served to crystallize for

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[1] Gender issues, for the purposes of this report, refers to systems of culturally constructed roles for men and women and relations between men and women.

stakeholders the need to develop a basic infrastructure to dialogue on and develop solutions to common problems. All clusters agreed on the need to develop "Human Resource (HR) Joint Committees" or "HR Teams," and to have those teams develop an action plan for the cluster. These HR Joint Committees or Teams are based in existing industry associations. All clusters also agreed to discuss mechanisms for funding those activities. A key set of initiatives to be sponsored by these new HR Teams will focus on the development and implementation of a skills gap analysis and a demand assessment. This will help improve the flow of effective information between industry stakeholders and education and training providers currently characterizing all clusters (see also the industry-educator linkage programs described below).

- *Internal Human Resource Management Activities.* Most industry cluster players view education and training as a cost, not an investment. Consequently, spending at the firm level on continuous education and training is abysmally low. Stakeholders agreed that this view needs to change, and the change must begin at the very top, with the CEOs. Agreed-upon activities in this area center on the development and dissemination (through HR conferences, for example) of case studies on "model companies" in Egypt, and local examples of best practices on the human resource management (HRM). Initiatives in this category are by and large designed to strengthen the industry's capacity to effectively articulate and prioritize demand for skills and promote the development and upgrading on standards on an on-going basis.

- *Educator / Industry Linkage Programs.* Initiatives in this category were designed to strengthen the education/training sector's capacity to understand, anticipate and respond to the industry's demand for skills training and education in certain areas. Linkage programs suggested by the stakeholders included actions such as industry-sponsored sabbaticals for professors (referred to as well as "internships for educators."), and broader outreach initiatives, such as the development of focused partnerships between a training provider and the industry revolving around a specific training problem (see the initiatives described below). This initial exercise then provides information with which to conduct a productive dialogue between industry stakeholders and education and training providers on broader training program objectives, content and methodologies.

WDS Team's Initiative Recommendations

In each of the cluster reports, the initiatives highlighted in the introduction and in Section 5 represent actions that the stakeholders designed and, to varying degrees, committed to implement. In order to make recommendations to USAID on which initiatives to support, the WDS Team used the following screening criteria to evaluate each initiative:

- *Screen 1 - High Impact:* Will this initiative positively enhance workforce development and the overall competitiveness of the cluster? The WDS Team based this decision on its cluster research as well as dialogue with stakeholders.

- *Screen 2 - Leverage:* Is there private sector buy-in, either of stakeholders' time or funding, that will help ensure that the initiative succeeds and has sustainability after USAID involvement ends. The WDS Team based this decision on stakeholder interviews, focus groups, and the strategic workshops.

Based on this decision-making process, the WDS Team recommends that USAID support the following cluster initiatives:

Tourism Cluster

Given Egypt's unique archeological and historical riches, its tourism industry has traditionally been dependent on cultural and historical products. However, in order to respond to the global demand for a multi-dimensional experience, the Egyptian industry is attempting to diversify and improve its product offerings and overall "tourist experience" in order to attract visitors. According to a 1994 CAPMAS tourism satisfaction survey, visitors report moderate levels of satisfaction with their Egyptian travel experiences and the number of repeat visitors is low.

The Egyptian tourism cluster is expected to grow at approximately 14 percent per year and expand into numerous new products and services such as eco-tourism. The key workforce development challenge is how to recruit 250,000 to 400,000 new workers expected to be needed, specifically in areas outside of Cairo where a majority of the growth will be centered. The development of these new tourism attractions means new recruitment challenges, particularly for retaining and attracting women; and that upgrading skills will be critical if the industry is to succeed in new tourism products and also increasing number of repeat visits.

Educators and training providers who could assist in this upgrading of skills are not positioned to do so. The traditional tourism curricula are not linked to the needs of industry: curricula have not been updated in years, equipment is outdated, new skills such as computers are rarely taught, and all of the curricula are very theoretical. As a result of dissatisfaction with response of universities and secondary schools, industry is beginning to respond with their own training programs; however, there remains a low level of industry investment in worker education, training, and overall human resource development.

With this in mind, the WDS Team recommends assisting in the implementation of the following initiatives:

Initiative 1: Association-Based Cluster Workforce Development Action Plan
- Develop tourism association capacity to address industry workforce development issues with technical assistance and training. This will include:
  - Working with Tourism Federation and its chambers to develop an HR Committee that will include not just industry representatives, but also training providers / educators.

- Working with the HR Committee(s) to identifying its (their) role within the association. This may include provision of expert TA with experience developing similar committees in counterpart US associations, providing case studies and models from U.S. associations, bringing U.S. Association counterparts to provide advice, develop participant training programs to create links with U.S. associations, etc.
- Helping the HR Committee organize and facilitate a Human Resource Management Conference for the Tourism industry to address areas of common interest (e.g. recruitment, skills upgrading through new and existing programs).
- Link to the soon-to-be created Egyptian Human Resources Association and to the Gore-Mubarak Sub-Committee on Education and Tourism Workforce activities.

Initiative 2: Human Resources Awareness Building
- Develop Egyptian case studies that highlight examples of cluster workforce challenges and the innovative methods some forward thinking Egyptian companies have taken to address those challenges.
- Link with Egyptian HR Association to develop a training event for CEOs in the industry using the case study research.
- Develop further dissemination strategies with the HR committees, including the use in additional training sessions, Web page publication, etc.

Initiative 3: Education Provider/Industry Linkage Programs
- Work with Tourism Federation on the development of the workforce demand assessment and its integration into the current industry survey. The WFD Team will provide examples from US counterpart associations.
- Work with the Association to develop strategies for using the information from the demand assessment to prioritize recruitment and training actions, improve working relationship with existing training providers, improve industry recruitment strategies, etc.
- Work with cluster stakeholders and through associations to design and implement a participant training program; the purpose of the program would be to provide stakeholders an opportunity to learn about, and evaluate the applicability of, US business experiences and linkages with community colleges in the development of tailored programs tourism.
- Link with experienced US-based program to develop a training program that focuses on the use of experiential learning for training in tourism, to be provided to members of the education/training provider community and sponsored by industry.
- Work with the Egyptian Hotel Association to develop and implement a teacher exchange program with industry (teacher internship program).

Agribusiness Cluster

Soon to be impacted by tariff and non-tariff barrier reductions, the agribusiness cluster is focused on expanding its export market, while retaining and growing its local market share. These goals imply not only upgrading workers' skill sets to develop and offer new products to these markets, but creating policies that assist firms in retaining seasonal workers and recruit qualified students to study agribusiness.

Upgrading skill sets in weak areas of the agribusiness value chain is critical in this very competitive export market environment. Some areas for improvement include: quality control and logistics management; without which the industry cannot guarantee the consistency in quality and timeliness of it products.

On the whole, four-year food science and agronomy programs are cutting-edge, but often lack exposure to solving real industry issues. Many of the skills necessary for this more competitive agribusiness cluster can be developed in short courses or programs, which along with training solutions are lacking in this cluster. Even within the firms that know they need to upgrade their workers' skills, there are low levels of investment in education and training, well below world standards, despite the fact that education and training providers are clearly not meeting all of their demand for training.

With this in mind, the WDS Team recommends assisting in the implementation of the following initiatives:

Initiative 1: Association-Based Cluster Workforce Development Action Plan
- Assist and help mentor the soon to be developed Joint Committee of HEIA and other cluster stakeholders to address workforce challenges. Assistance to this committee will be coordinated through ALEB and other existing contractors (e.g. MDI, IESC) and could include:
  - Developing an action plan to address key workforce development priorities. The action plan will contain specific activities to be undertaken in the first year, as well as indicators for measuring progress on each of these activities.
  - Developing a budget and financing model for financing the action plan.
  - Developing a strategy for linking the workforce joint committee to the new Egyptian Human Resource Association.
  - Planning with the cluster stakeholders the strategy for disseminating the workforce development plan, case studies, and road map.
  - As requested, provide tailored human resource management TA to individual firms, to assist them in the implementation of this template.

Initiative 2: Human Resources Awareness Building
- Develop Egyptian case studies that highlight examples of the cluster workforce challenges and the innovative methods some forward thinking Egyptian companies have taken.
- Link with Egyptian HR Association to develop a training event for CEOs in the industry using the case study research.
- Explore development of human resource "best practices road map" to distribute to members.
- Work with the Joint Committee to develop a model manual for corporate HRM systems that is appropriate for the industry and could be adapted as a template.
- Develop a strategy with HR Association and Joint Committee to disseminate this "road map" and the HRM model manual/template.
- Work with the Joint HR Committee to develop other strategic options for building awareness of the importance of HR systems development

Initiative 3: Education Provider/Industry Linkage Programs
- Work with HEIA/Joint Committee to develop a workforce demand assessment that accurately articulates industry's skills needs to educators and training providers.
- Work with the Joint Committee to develop a strategy for disseminating demand assessment results to industry and educators / training providers.
- Working with cluster stakeholders to create a formal internship program that link students to industry.

Information Technology

Today, the Egyptian IT cluster is relatively small and focused on a narrow segment of the software customization market, Arabization. Sustained growth of the cluster will require expanding into other market segments. This nascent IT cluster anticipates needing 4,000 to 5,000 new employees per year. With this growth and the speed in which this industry changes, the key workforce challenges will be recruiting and retaining the best and brightest, while rapidly introducing and disseminating skills to new workers.

The strategy question is recruiting and training for expansion into what other segments? Cluster stakeholders are primarily focused on the demand for programmers, but it is worth remembering that the programmers are only a small part of the bigger picture. If the Egyptian cluster wanted to expand beyond the Arabization market, it is missing other critical skills such as technical writing, program design, quality control, and program testing.

The positive aspect in attempting to obtain these skills is that the traditional education sector is new and not yet ossified. As a result, some excellent curricula and courses are being offered to students, but are very limited considering the number of employees the cluster is seeking. Most of these programs are four-year computer science programs with limited short courses. Such programs as two-year associate degrees and other types of focused short-term training solutions will need to emerge if the education and training providers are to meet the needs of this very skills intensive industry. As the global IT cluster has such fast paced development and innovation, the Egyptian IT cluster will need to provide varied outlets or platforms for developing and delivering appropriate training to keep up.

With this in mind, the WDS Team recommends assisting in the implementation of the following initiatives:

Initiative 1: Association-Based Cluster Workforce Development Action Plan
- Form a Joint Human Resource (HR) Committee that unites members of all four industry associations, plus users and educators to discuss and develop strategies to address common workforce development issues.
- Develop and action plan for collecting and disseminating cluster workforce information to members.
- Develop a strategy for developing a clearinghouse for this collected information.

Initiative 2: Human Resource Awareness Building
- Develop Egyptian case studies that highlight examples of the cluster workforce challenges and the innovative methods some forward thinking Egyptian companies have taken.
- Link with Egyptian HR Association to develop a training event for CEOs in the industry using the case study research.
- Develop a strategy with the Joint HR Committee to disseminate the case studies through a series of high level CEO conferences on corporate HRM training programs.
- Work with the Joint HR Committee to develop other strategic options for building awareness of the importance of HR systems development.

- Develop a strategy for linking to the Egyptian Human Resources Association in the development and implementation of these activities.

Initiative 3: Education Provider/Industry Linkage Programs
- Mentor the expansion of the existing "Triangle Program" concept/model beyond electronics and to other segments of the IT industry.
- Identify research priorities and develop into joint educator/industry projects.
- Work with cluster HR Committee to explore the development of a workforce demand assessment.
- Work with the Association to develop strategies for using the information from the demand assessment to prioritize recruitment and training actions, improve working relationship with existing training providers, improve industry recruitment strategies, etc.
- Develop a plan for disseminating the results of this initial linkage program.

Next Steps

Although there are numerous similarities between the initiatives recommended in each cluster, the WDS Team believes that continuing to utilize the cluster specific approach offers numerous advantages. First, common cluster stakeholders can better understand the concept of competitiveness, and how interrelated products and services need to work together to succeed. Ideally this type of collaborative stakeholder action will produce sustainable processes that support productive employment. In addition, the cluster approach creates dialogue and linkages between industry and the educators / training providers in the same fields. With this type of focused dialogue, educators and training providers are often more able to take action on focused cluster ideas, than to tackle wider activities such as entire curriculum development.

The true test of this Workforce Development Strategic Planning Process will be capitalizing on present stakeholder momentum and ensuring solutions materialize into real, dynamic change. Over time, some recommended initiatives may loose momentum and become less relevant to stakeholders, while other initiatives might increase in importance to the stakeholders and successfully implemented by the them without any technical assistance. By moving the Workforce Development Strategic Planning into its implementation stage, USAID has the opportunity to ensure that the dialogue and action created by this process produces concrete workforce development results leading to the ultimate goal of greater cluster competitiveness.